

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-17. (canceled).

Claim 18. (new) A stalk roll for a harvesting device for harvesting a crop head from a stalk of a plant comprising:

a roll body and a plurality of roll drivers distributed around the roll body wherein the roll drivers each have a roll driver inner edge and a roll driver outer edge and further wherein each roll driver inner edge is adjacent to the roll body and the roll drivers each project outward from the roll body;

the roll body having a roll body front end with a roll body front diameter and a roll body rear end with a roll body rear diameter wherein during normal operation the roll body front end encounters a stalk of a plant prior to the roll body rear end and the roll body front diameter is greater than the roll body rear diameter; and

the plurality of roll drivers each having a roll driver front end attached near the roll body front end and a roll driver rear end attached near the roll body rear end wherein the plurality of roll driver front end outer edges define a stalk roll front diameter and the plurality of roll driver rear end outer edges define a stalk roll rear diameter and further wherein the stalk roll front diameter is less than the stalk roll rear diameter.

Claim 19. (new) A gathering and picking device for a harvesting device for harvesting a crop head from a stalk of a plant, the gathering and picking device comprising:

a first stalk roll and a second stalk roll;

the first stalk roll comprising a first roll body and a plurality of first roll drivers distributed around the first roll body wherein the first roll drivers each have a first roll driver inner edge and a first roll driver outer edge and further wherein each first roll driver inner edge is adjacent to the first roll body and the first roll drivers each project outward from the first roll body;

the first roll body having a first roll body front end with a first roll body front diameter and a first roll body rear end with a first roll body rear diameter wherein during normal operation the first roll body front end encounters a stalk of a plant prior to the first roll body rear end and the first roll body front diameter is greater than the first roll body rear diameter;

the plurality of first roll drivers each having a first roll driver front end attached near the first roll body front end and a first roll driver rear end attached near the first roll body rear end wherein the plurality of first roll driver front end outer edges define a first stalk roll front diameter and the plurality of first roll driver rear end outer edges define a first stalk roll rear diameter and further wherein the first stalk roll front diameter is less than the first stalk roll rear diameter;

the second stalk roll comprising a second roll body and a plurality of second roll drivers distributed around the second roll body wherein the second roll drivers each have a second roll driver inner edge and a second roll driver outer edge and further wherein each second roll driver inner edge is adjacent to the second roll body and the second roll drivers each project outward from the second roll body;

the second roll body having a second roll body front end with a second roll body front diameter and a second roll body rear end with a second roll body rear diameter wherein during normal operation the second roll body front end encounters a stalk of a plant prior to the second roll body rear end and the second roll body front diameter is greater than the second roll body rear diameter; and

the plurality of second roll drivers each having a second roll driver front end attached near the second roll body front end and a second roll driver rear end attached near the second roll body rear end wherein the plurality of second roll driver front end outer edges define a second stalk roll front diameter and the plurality of second roll driver rear end outer edges define a second stalk roll rear diameter and further wherein the second stalk roll front diameter end is less than the second stalk roll rear diameter.

Claim 20. (new) The gathering and picking device of claim 19 wherein the first stalk roll further comprises a first stalk roll axis.

Claim 21. (new) The gathering and picking device of claim 20 wherein the second stalk roll further comprises a second stalk roll axis.

Claim 22. (new) The gathering and picking device of claim 21 wherein the first stalk roll axis and the second stalk roll axis are parallel to each other.

Claim 23. (new) The gathering and picking device of claim 19 further comprising a gap defined by the first roll body and one of the plurality of second roll driver outer edges when the one of the plurality of second roll driver outer edges is adjacent to the first roll body wherein the gap is approximately of constant width from the first roll body front end to the first roll body rear end.

Claim 24. (new) A gathering and picking device for a harvesting device for harvesting a crop head from a stalk of a plant, the gathering and picking device comprising:

a first stalk roll having a first stalk roll axis, and a second stalk roll having a second stalk roll axis, wherein the first stalk roll axis and the second stalk roll axis are parallel to each other;

the first stalk roll comprising a first roll body and a plurality of first roll drivers distributed around the first roll body wherein the first roll drivers each have a first roll driver inner edge and a first roll driver outer edge and further wherein each first roll driver inner edge is adjacent to the first roll body and the first roll drivers each project outward from the first roll body;

the first roll body having a first roll body front end with a first roll body front diameter and a first roll body rear end with a first roll body rear diameter wherein during normal operation the first roll body front end encounters a stalk of a plant prior to the first roll body rear end and the first roll body front diameter is greater than the first roll body rear diameter;

the plurality of first roll drivers each having a first roll driver front end attached near the first roll body front end and a first roll driver rear end attached near the first roll body rear end wherein the plurality of first roll driver front end outer edges define a first stalk roll front diameter and the plurality of first roll driver rear end outer edges define a first stalk roll rear diameter and further wherein the first stalk roll front diameter is less than the first stalk roll rear diameter;

the second stalk roll comprising a second roll body and a plurality of second roll drivers distributed around the second roll body wherein the second roll drivers each have a second roll driver inner edge and a second roll driver outer edge and further wherein each second roll driver inner edge is adjacent to the second roll body and the second roll drivers each project outward from the second roll body;

the second roll body having a second roll body front end with a second roll body front diameter and a second roll body rear end with a second roll body rear diameter wherein during normal operation the second roll body front end encounters a stalk of a plant prior to the second roll body rear end and the second roll body front diameter is greater than the second roll body rear diameter;

the plurality of second roll drivers each having a second roll driver front end attached near the second roll body front end and a second roll driver rear end attached near the second roll body rear end wherein the plurality of second roll driver front end outer edges define a second stalk roll front diameter and the plurality of second roll driver rear end outer edges define a second stalk roll rear diameter and

further wherein the second stalk roll front diameter end is less than the second stalk roll rear diameter; and

a gap defined by the first roll body and one of the plurality of second roll driver outer edges when the one of the plurality of second roll driver outer edges is adjacent to the first roll body wherein the gap is approximately of constant width from the first roll body front end to the first roll body rear end.